

Glass mtns. 1956
with C.O. Dunbar
August
1956

Glass Mtns

①

Aug 18, 1956

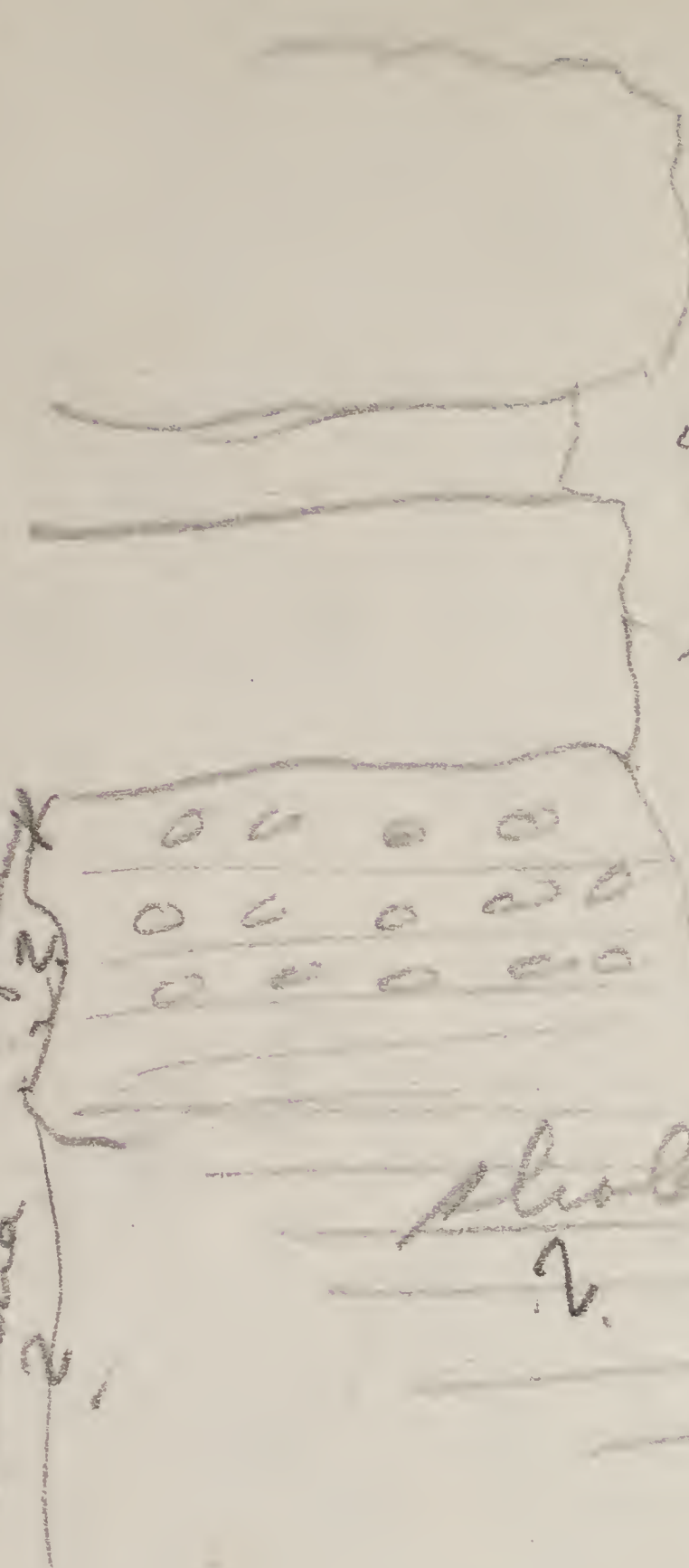
Visited Windmill hill and studied knobs at base. These are thought by Dunbar & Skinner to be slumpys. This would eliminate any Wolfcamp outcrop low in this hill. As a matter of fact according to the views expressed there would be no Wolfcamp here unless it be the 40 or 50' of cgl sh. + ss beneath the Scacchiella ledge. The upper beds & the ls I think belong to Ls 1 of the Leonard and are full of the small fusuline *Sluicella*.

Aug 19.

Leonard Mtn. - Large knob in southeast angle of mountain is now thought to be a slumped block. It has dips of about 45° . The Uddenites shale seems to be OK but may be lower in the Pennsylvanian than Uddenites. Fusulines from top of knob to base of big conglomerate were thought by Skinner to be of Gaptank age.

1111

Wulfen
Panna
2



Shubertella ls.
Leonard ls. #1

yellow shale

Dacrydella ls. agl.

agl, sh. & ss. 50'

shale
2

ls. with
Shubertella &
Dacrydella
slump from above

②

The big conglomerate is either top Permian or lower Permian probably. The latter. The Scaphinella bed just on top of this cgl. contains Wolfcamp fusulines and is now thought to be upper Wolfcamp. It is thought that Wolfcamp extends to base of King's Hess dolomite. The sequence now is greatly different from the published section.

In afternoon visited west end of hill $\frac{1}{2}$ mile N of Hess Ranch house. Fusulines here were pronounced as Wolfcamp.

Aug 21

In Uddenites saddle in Wolfcamp hills. Bed 2 on N side saddle is about 25'. Bed 4 appears on both sides saddle. Opposite first gully to N up canyon top of bed 2 and conglomeratic base of bed 4 come together. My collection seem to be in top of bed 2 but may be in rubble 4. Base of 4 all along is congl.

③

with rounded ls. pebbles.

Just above (E) of ravine from N interval between 4 + 2 widens but at entrance to ravine from S the Bed 2 is in the bed of the canyon & forms cascades.

At mouth of S ravine shale between 2 + 4 is about 10' and 4 goes east on N side of ravine. Rounded surface of bed 2 forms W wall of south gully. Up south gully which turns to go east, gully cuts along abrupt face of bed 2 the shale between 2 + 4 thickening considerably.

N down slope from end of 4 in ravine. Long slope goes thru shale & ls lenses to bed 9. Dip slope of hill to bend of Canyon is mostly in and above 9. Biohermal mounds & ls lenses appear scattered over surfaces.

One biohermal hump has many fucus algae.

Bed 9 crosses stream exactly at the elbow of the canyon! At this point there are two limestones the lowest about 4' thick, then about 10' of shale followed by another also about 4' thick.

bed 9 = bed 12 of King

(4) Bed 4 is in stream 100 paces down from lower ledge of bed 9.

On bed 4 at E-W gully on long slope saw a fine *Strophomena* embedded in surface. My *Schizophoria* beds are definitely in part of 9.

Bed 4 varies greatly in thickness has bioherms in it and varies in distance above bed 2.

The shale between 4 & steeply sloping 2 is cut out to form the ravine.

Section up W side of north ravine. Dip used is 10° .

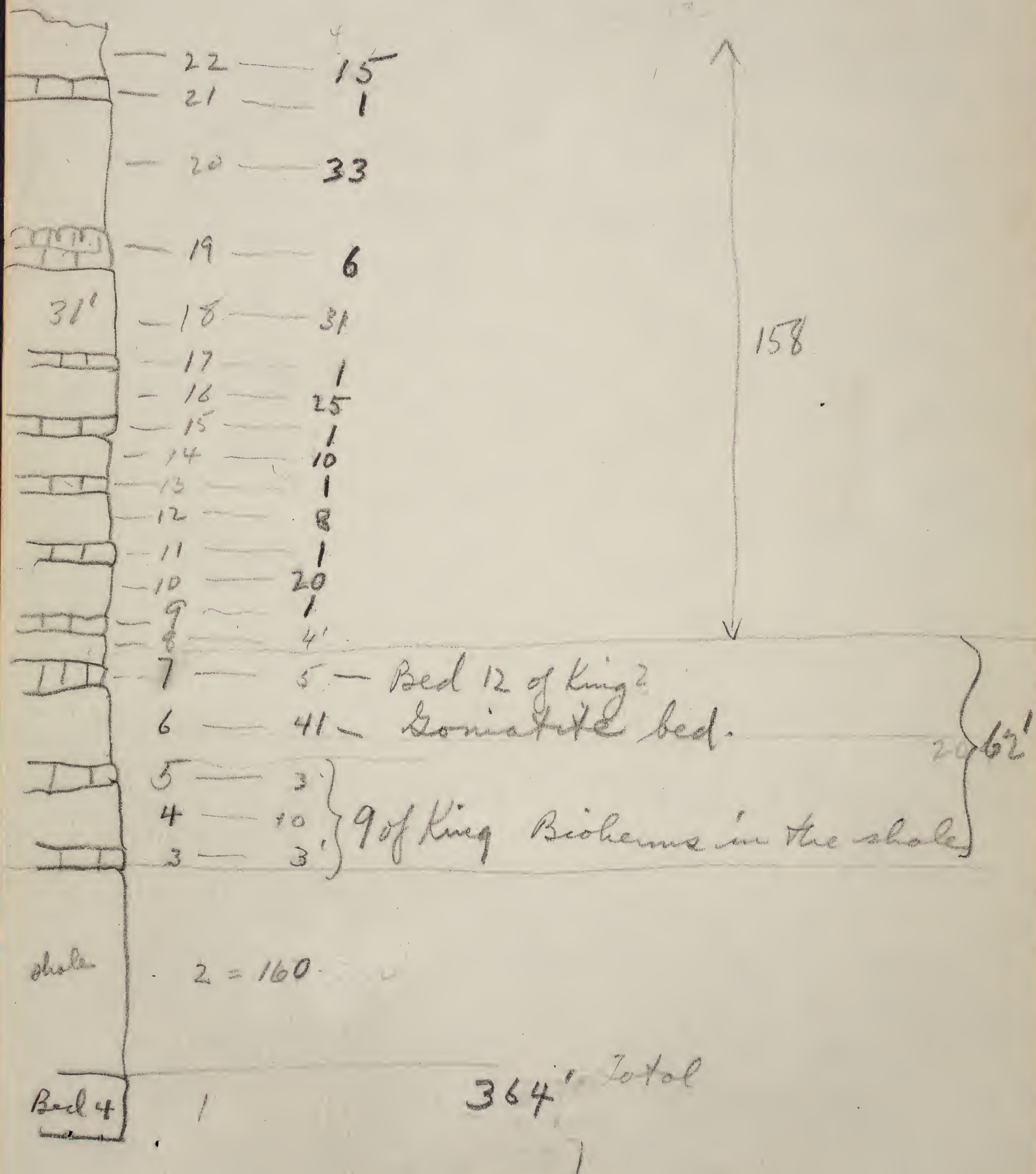
2 Is 23 steps at $10^\circ + 2'$ all in shale with possible limestone lenses = 127'

3. yellow weathering limestone, granular conglomeratic, biohermed about 3' thick at this place. This would be base of bed 9 at hill to west.

4. Shale about 10' thick with one thin ls 3-4" thick about 2' from base

5. Coarsely granular ls. about $1\frac{1}{2}'$ thick - 3'

6. Shale with scattered ls lenses + biohermal masses. *Proterozoites*. Top with cobbly



⑤. Limestone abounding in large
 20' fossiliferous at very top 4-1"

7. Granular, yellow weathering
 ls. with *Prod. huacensis* 5'

8 shale about 4'

9 limestone, granular orange yellow 1'

10 Shale 20' with 4" layer of
 yellow ls at middle

11 granular limestone, flat-topped
 1" - 1 1/2' thick

12 Shale 8'

13 yellow granular ls. 1/2' - 1' thick

14 shale 10' but thin 2-3" ls
 one to 2' above base

15 Limestone platy 6" - 9" thick

16 25' of shale with thin
 yellow ls scattered in it

17. Limestone with small
 rounded ls pebbles about 9"

18 31' shale

19 Limestone granular, broken

⑥.

six feet thick where measured
but thinning or thickening laterally

20 Shale 33'

21 limestone granular, yellow
one foot thick. Fusulina rough

22 Yellow Wolfcamp float in Hess
cobbles suggests an additional
10-15' of section

On west side of adductives the
bed 9 also forms a double
tier and many broken
appear to complicate the
situation. What we call bed
10 appears down the slope
to the north of bed 9 and
never makes a cliff or
ledge. All my collections
should be labelled 9-12 or
given some other designation.
It would be best to call
all collections from 701d
Upper Wolfcamp rather than
bed 12. I would guess that
part of the section to be
mostly above bed 12.

My 701l most certainly
is in bed 2 and is about 200'
below top of hill. at base
of slope at 701l bed 2 is

Bed 4
1963

⑦.

is low on the flank of the hill, perhaps 25'-50' above floor of reentrant. From the top of 2 to bed four there must be 50-60' because the interval spreads out widely and includes a sandstone bed of a foot or two thickness as well as some other limestones.

Aug 23

Visited Hess Ranch to see Word / limestone. The limestone consists of 2 beds, one a thick heavy-bedded limestone below a biohermal limestone in which colonial tetracorals are fairly common. Brachiopods are rare. Collected two blocks from two places along this slope.

D.

Blocks

Decie Windmill)

705a

Wolfcamp

701K

Wolfcamp

701K

"

701

707h

709 ~~h~~ C

706 b

Aug 23

706 f

4

2

1

4

1

2

2

4

1

1

With one box shipment
came to 2057 pounds.